

# Assessing the Value of Negotiable Instruments.

Type 1 → Promissory notes (non interest)  
Type 2 → Promissory notes (interest bearing)

AMT

## Exercise 9.4 pp 340-341

- ① NON INTEREST BEARING NOTE  $\rightarrow$  \$6000 value  
Discounted 54 mths before its due date  
6% rate  
Quarterly Compd
- $\left\{ \begin{array}{l} - 6\%/4\text{ pps} = 1.5\% \text{ pp.} \\ - 54\text{ mths} = 4.5\text{ yrs} = 18\text{ quarters} \end{array} \right\}$

$$\begin{aligned} PV &= \frac{FV}{(1+i)^n} = \frac{6000}{(1+0.015)^{18}} \\ &= \frac{6000}{1.307} \\ &= \$4590.67 \end{aligned}$$

$\therefore$  The note is worth \$4590.67 today.

TYPE I Problem

Exercise 9.4 pp 330 - 331

Now-Interest Bearing  
Proceeds 4200

(2)

Date period March 1, 2019  $\rightarrow$  Aug 1, 2023  $\rightarrow$  53 months

Rate 7.5% Compounded Monthly  $7.5\%/12 = 0.625\%$   
PP

$$\begin{aligned} PV &= \frac{FV}{(1+i)^N} \\ &= \frac{4200}{(1+0.00625)^{53}} \\ &= \$3018.16 \end{aligned}$$

$\therefore$  \$3018.16 will accumulate to \$4200 if left in the investment for the prescribed time & rate.

Type 1 Problem

Exercise 9.4 p 341

#5

Syr term = 10 periods

3000 PV

8% / semi annual

$\frac{8\%}{2} = 4\% \text{ pp}$

STEP 1  $\rightarrow$  What will be the value of this amount at the end of the Contract?

$$FV = 3000 (1 + 0.04)^{10}$$

$$= 3000 \times 1.48$$

$$= \$4440.73 - \therefore \text{This is the end of term value.}$$

STEP 2 Now Discount the Value found in Step 1

$$9\% \text{ quarterly} = \frac{9\%}{4} = 2.25\% \text{ pp.}$$

$$21 \text{ mths} = \frac{21}{12} = 1.75 \text{ yr} = 7 \text{ quarters}$$

$$PV = \frac{4440.73}{(1 + 0.0225)^7}$$

$$PV = 3800.24$$

$\therefore$  The discounted value of the instrument is 3800.24